

MARINE SCIENCES (B.S.)

Bachelor of Science (B.S.) in Marine Sciences

The Stokes School of Marine & Environmental Sciences offers a B.S. in Marine Sciences to address society's need for specialized understanding of the marine environment. This program is designed to prepare students for tackling challenges and opportunities presented by the "Blue Economy". The "Blue Economy" encompasses a broad range of job opportunities related to the marine environment allowing graduates to pursue careers in government, academic, commercial and industrial settings. The degree program takes advantage of the location of the University South Alabama as well as its partnership with the Dauphin Island Sea Lab, DISL, to provide a unique educational experience as well as experiential learning opportunities. These institutional locations give students direct access to the natural marine laboratories of the Mobile Tensaw Delta, Mobile Bay, and the Gulf of Mexico where students will be immersed in all things marine!

A cornerstone of this program is the Semester by the Sea at DISL where students in this program will spend their spring semester of junior or senior year taking coursework at DISL with the option of living in residence at DISL. Students must complete the following courses prior to attending the spring semester by the sea: BLY 121/L, BLY 122/L, CH 131/L, CH 132/L, PH 114/L or PH 201/L, MAS 134/L, MAS 331/L, and MAS 332/L.

Degree Requirements

Code	Title	Hours
General Education Requirements. Please see the STEM requirements below that must be taken for this major.		
https://bulletin.southalabama.edu/programs-az/arts-sciences/#generaleducationtext		53-57
Required Marine Sciences Courses		37
MAS 134 & 134L	Ocean Science and Ocean Science Lab	4
MAS 331 & 331L	Marine Science I and Marine Sciences I Lab	4
MAS 332 & 332L	Marine Science II-W and Marine Sciences II Lab	4
MAS 336	Marine Operations/Research-W	3
MAS 337 & 337L	Marine Geology and Marine Geology Lab	4
MAS 431 & 431L	Field and Laboratory Measuremn and Field and Laboratory Measure	4
MAS 475	Marine Ecology	4
Choose 3 of the following DISL Summer courses:		10
MAS 371	Shark and Ray Biology	
MAS 367	Marine Biology	
MAS 430	Marine Botany	
MAS 451	Marine Vertebrate Zoology	
MAS 471	Marine Invertebrate Zoology	
MAS 477	Coral Reef Biology & Ecology	
MAS 478	Marine Mammal Hlth/Strd Resp	
MAS 488	Field Marine Science II	
MAS 490	Special Topics	

Other Course Requirements

See list below

Minor Requirements

A minor is required for this degree program. 18-24

The Composite Science minor consists of three laboratory science sequences. Marine Science students may satisfy a Composite Science minor by completing the major additional course requirements (i.e. BLY 121/L, BLY 122/L, CH 131/L, CH 132/L, and PH 114/L) plus either PH 115 & PH 115L or PH 202 & PH 202L. Or a student could take GY 111 & GY 111L and GY112 & GY 112L to complete the Composite Science minor or by taking GEO 101 & GEO 101L and GEO 102 & GEO 102L.

A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120

All undergraduates must complete two designated writing credit (W) courses.

Note: PHL 231 is suggested as one of the AREA II. General Education Requirements.

Other Course Requirements:

Additional courses required for the major includes 16 credits hours of general education courses in the following list.

Code	Title	Hours
MA 125	Calculus I	4
BLY 121 & 121L	General Biology I and General Biology I Lab	4
BLY 122 & 122L	General Biology II and General Biology II Laboratory	4
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
Choose one from the following:		4-5
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab	
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	

Major Milestones

Course	Title	Hours
First Year		
Fall		
CAS 100	First Yr Exp -	2
EH 101	English Composition I	3
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
BLY 121 & 121L	General Biology I and General Biology I Lab	4
MA 125	Calculus I	4
		Hours
		17
Spring		
MAS 134 & 134L	Ocean Science and Ocean Science Lab	4
EH 102	English Composition II	3
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4

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BLY 122 & 122L	General Biology II and General Biology II Laboratory	4
Hours		15
Second Year		
Fall		
MAS 331 & 331L	Marine Science I and Marine Sciences I Lab	4
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab	5
History, Social & Behavioral Sciences (Gen Ed)		3
Humanities & Fine Arts Elective (Gen Ed)		3
Hours		15
Spring		
CA 110	Public Speaking	3
PHL 231	Social Ethics (Gen Ed - HUMANITIES ELECT)	3
MAS 332	Marine Science II-W	3
MAS 332L	Marine Sciences II Lab	1
Humanities & Fine Arts Elective (Gen Ed)		3
Hours		13
Third Year		
Fall		
History, Social & Behavioral Sciences Elective (Gen Ed)		3
Foreign Language I (Gen Ed)		3
Humanities & Fine Arts Elective (Gen Ed)		3
Minor Course		3
Hours		12
Spring		
MAS 336	Marine Operations/Research-W	3
MAS 475	Marine Ecology	4
MAS 431 & 431L	Field and Laboratory Measuremn and Field and Laboratory Measure	4
MAS 337 & 337L	Marine Geology and Marine Geology Lab	4
Hours		15
Summer		
Students may take a DISL summer course during Second year summer to lighten load during Third Year Summer.		
MAS 371	Shark and Ray Biology	2
MAS 451	Marine Vertebrate Zoology	4
MAS 471	Marine Invertebrate Zoology	4
Hours		10
Fourth Year		
Fall		
History, Social, and Behavioral Sciences Elective (Gen Ed)		3
Minor Course		3
Minor Course		3
Minor Course		3
Hours		12
Spring		
Foreign Language II (Gen Ed)		3
History, Social, and Behavioral Sciences Elective (Gen Ed)		3
Minor Course		3
Minor Course		3
Hours		12
Total Hours		121

* Students who earn an English ACT score of 27 or above, SAT score of 610 or above on the verbal portion, or a new SAT Reading Test can opt out of EH 101.

** Must have one history elective and one literature elective. In addition, students must choose a second history or literature to complete a two-part sequence.

*** There may be additional prerequisites for upper level major electives. Refer to the bulletin for more information.

All Arts and Sciences majors require a minor between 18 and 24 hours. Courses used in a minor can also be used for general education requirements or major requirements (up to two courses).

Two designated writing (W) courses are required with at least one course chosen from offerings in the student's major or minor. Courses carrying this required credit are identified in the University Bulletin by a (W) after the course title.

The Sample 4-year plan is designed as a guide for students preparing for their course selections. This information provides only a suggested schedule. Actual course selections should be made in consultation with an advisor.

Notes

Students with ACT Math scores 22-23 should take CH 100 and MA 112 in the first semester, and they will graduate with 128 hours; MA 125 also satisfies the math requirement. Students with ACT Math scores 21 and below should begin math courses in the summer before Fall - Year 1.